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## AMENDMENTS TO THE CLAIMS

1-21 (Cancelled)

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22. (Previously Presented) An isolated nucleic acid having at least 80% nucleic acid sequence identity to:

- a nucleic acid sequence encoding the polypeptide having the sequence of (a) SEO ID NO:2, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
- a nucleic acid sequence encoding the polypeptide having the sequence of (b) SEO ID NO:2, lacking its associated signal peptide, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
- (c) the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
- the full-length coding sequence of the nucleic acid having the sequence of (d) SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation; or
- the full-length coding sequence of the cDNA deposited under ATCC (f) accession number 203581, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation.
- The isolated nucleic acid of Claim 22 having at least 23. (Previously Presented) 85% nucleic acid sequence identity to:
  - a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
  - a nucleic acid sequence encoding the polypeptide having the sequence of (b) SEQ ID NO:2, lacking its associated signal peptide, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
  - the nucleic acid having the sequence of SEQ ID NO:1, wherein said (c) isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

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(d) the full-length coding sequence of the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation; or

- (f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203581, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation.
- 24. (Previously Presented) The isolated nucleic acid of Claim 22 having at least 90% nucleic acid sequence identity to:
  - (a) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
  - (b) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, lacking its associated signal peptide, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
  - (c) the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
  - (d) the full-length coding sequence of the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation; or
  - (f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203581, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation.
- 25. (Previously Presented) The isolated nucleic acid of Claim 22 having at least 95% nucleic acid sequence identity to:
  - (a) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
  - (b) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, lacking its associated signal peptide, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

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(c) the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;

- (d) the full-length coding sequence of the nucleic acid having the sequence of SEQ ID NO:l, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation; or
- (f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203581, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation.
- 26. (Currently Amended) The isolated nucleic acid of Claim 22 having at least 99% nucleic acid sequence identity to:
  - (a) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
  - (b) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, lacking its associated signal peptide, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
  - (c) the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
  - (d) the full-length coding sequence of the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation; or
  - (f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203581, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation.

## 27-34 (Cancelled)

35. (Currently Amended) An isolated nucleic acid that hybridizes <u>under stringent</u> conditions to:

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- (a) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
- (b) a nucleic acid sequence encoding the polypeptide having the sequence of SEQ ID NO:2, lacking its associated signal peptide, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
- (c) the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation;
- (d) the full-length coding sequence of the nucleic acid having the sequence of SEQ ID NO:1, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation; or
- (f) the full-length coding sequence of the cDNA deposited under ATCC accession number 203581, wherein said isolated nucleic acid encodes a polypeptide having the ability to induce chondrocyte redifferentiation.
- 36. (Previously Presented) The isolated nucleic acid of Claim 35, wherein said hybridization occurs under stringent conditions, wherein the stringent conditions comprise:

50% formamide;

5 x SSC (0.75 M NaCl, 0.075 M sodium citrate);

50 mM sodium phosphate (pH 6.8);

0.1% sodium pyrophosphate;

5 x Denhardt's solution;

sonicated salmon sperm DNA (50 micrograms/ml)

0.1% SDS, and 10% dextran sulfate at 42°C;

washes at 42°C in 0.2 x SSC (sodium chloride/sodium citrate) and 50% formamide at 55°C; and

a high-stringency wash consisting of 0.1 x SSC containing EDTA at 55°C.

- 37. (Cancelled)
- 38. (Previously Presented) A vector comprising the nucleic acid of Claim 22.
- 39. (Previously Presented) The vector of Claim 38, wherein said nucleic acid is operably linked to control sequences recognized by a host cell transformed with the vector.

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40. (Previously Presented)

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A host cell comprising the vector of Claim 38.

41. (Previously Presented) The host cell of Claim 40, wherein said cell is a

CHO cell, an E. coli or a yeast cell.